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# Mission Operations Working Group Status

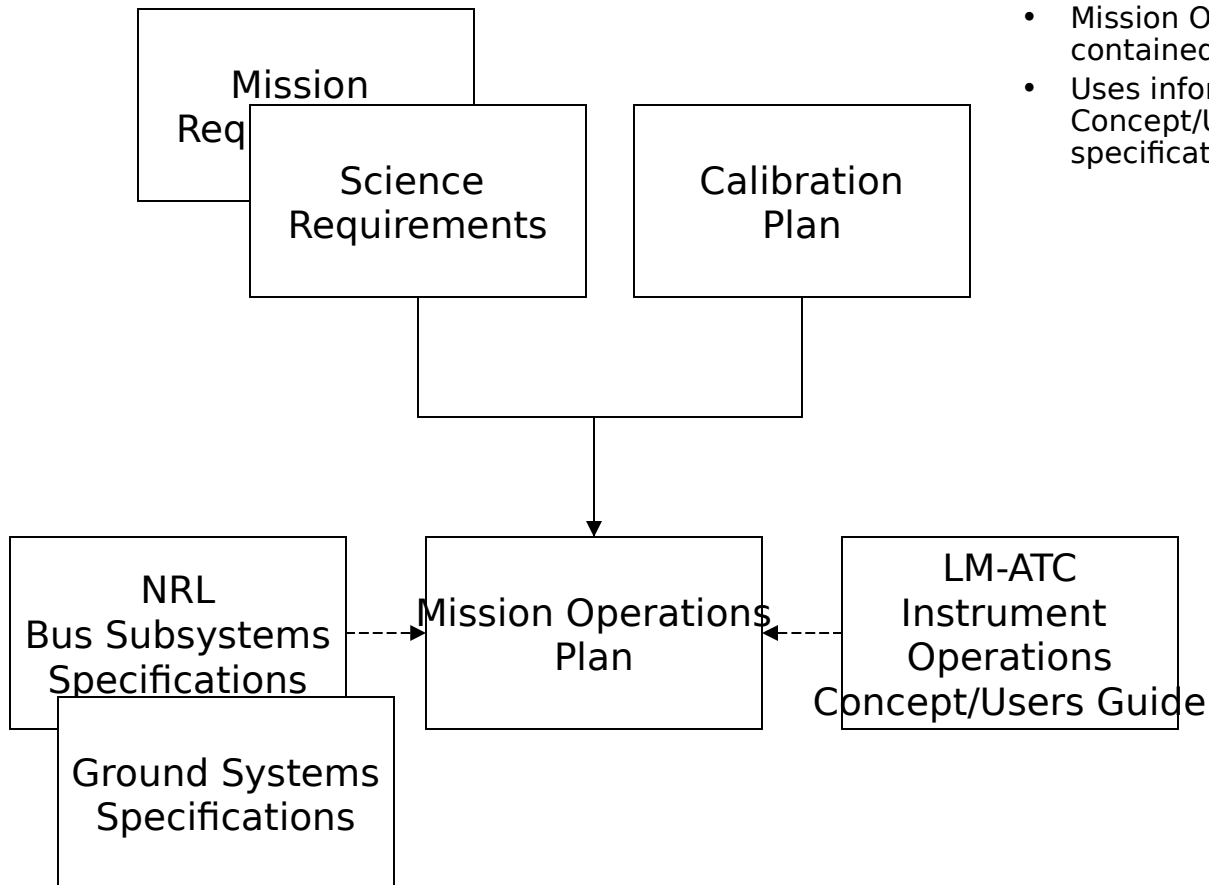
June 2001 Technical Interchange Meeting



# Relation to Other Program Documents

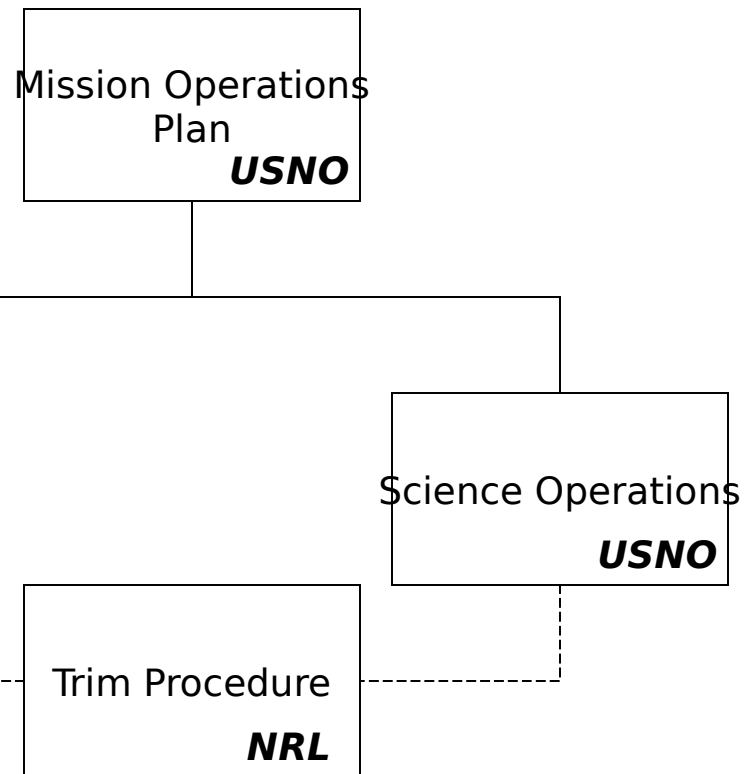


- *Purpose:* Ensure that the various mission elements can be integrated into a single plan that satisfies mission and science requirements.
  - Planning tool
  - Requirements generation tool for components
- Mission Ops Plan driven by requirements contained in SRD, MRD, Calibration Plan.
- Uses information contained in Instrument Ops Concept/User's Guide, Bus and Ground systems specifications.





# What's in the Mission Ops Plan?



- Mission Operations Plan
  - Integrated document
  - Early Operations Phase
    - Led by Klein/NRL
    - Early operations timeline and appropriate, related information
    - Include instrument-related events specified by LM-ATC and USNO
  - Trim Procedure
    - Led by DeLaHunt/NRL
    - Describes procedure for final trim maneuver
    - Includes heavy input from LM-ATC and USNO
  - Science Operations Phase
    - Led by Dorland/Gaume/USNO
    - Describes nominal timeline, schedules, procedures to be executed in Science Phase
    - Coordinated with NRL and LM-ATC.



# Status



Section	Lead	Status
Early Operations Phase	Klein/NRL	Draft timeline (to be briefed)
Trim Procedure	DeLaHunt/NRL	<p>Draft timeline and procedures- DeLaHunt to discuss this in ADCS presentation.</p> <p>More iterations required to understand instrument/attitude alignment and final trim procedures</p>
Science Operations Phase	Dorland/USNO	Collecting information, side meeting



# Science Activities (Preliminary)



## Early Operations Phase—Science Events

### 1. Heaters

- Turned on at TBD
- Turned off at TBD--end of outgassing

### 2. Perform Instrument Functional Tests

- Flat field test--CCD checkout
- Flat field test trending
- Bias frames with aperture doors closed
- Trending of bias frames
- Focus change frequency monitoring for outgassing monitoring
- Focus adjustment
- Charge Injection

### 2. Ground Command Tests

- Mode/State Changes
- TDI rate changes
- Catalog uploads

### 3. Issues:

- Will we be able to focus with heaters on?

## Science Operations Phase-Schedule

### Second

1. Update one star per second in onboard catalog.

### Daily

1. Charge injection test once per day per ccd.

### Weekly

1. Photometric calibration observations on all ccds,  $m_v = [9,15]$ , full coverage every week. (are these observations restricted to photometric reference stars?)
2. Photometric calibration observations on ND filtered ccs,  $m_v = [5,8]$ ,
3. Flat field observation once per week per chip.
4. TBD dark field (star free) observations (window size?) once per week per chip.
5. TBD observations of  $m_v = [9,15]$  in “sweet spot of distortion”

### Monthly

6. Observations of photometric reference stars made with different gain settings for the purpose of gain calibration.
7. 600 x 600 raster (? Calibration plan says only “Big 2-D raster”) observations including multiple science targets with full magnitude range.